3932207 Patent

FIG. 1

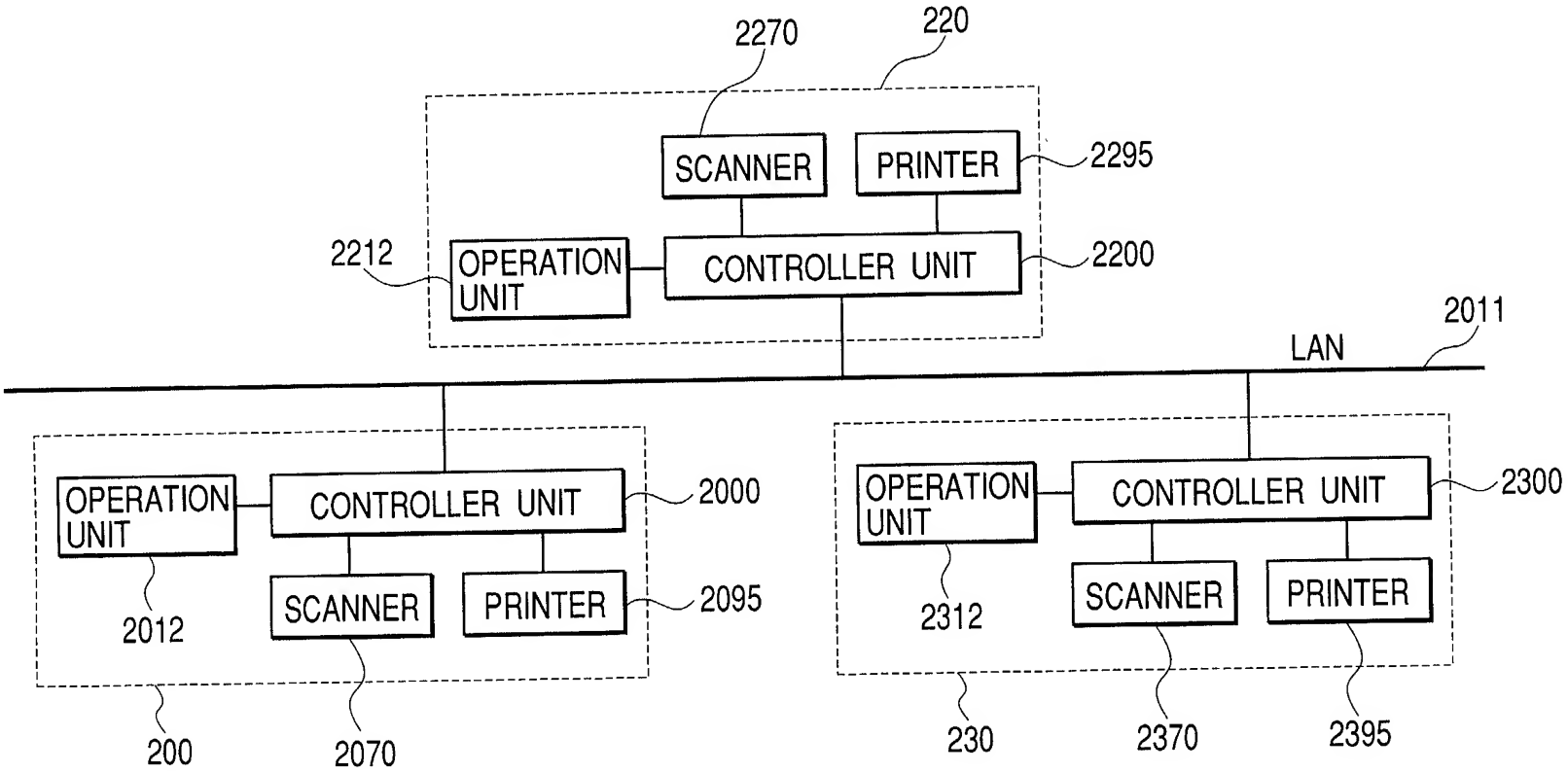


FIG. 2

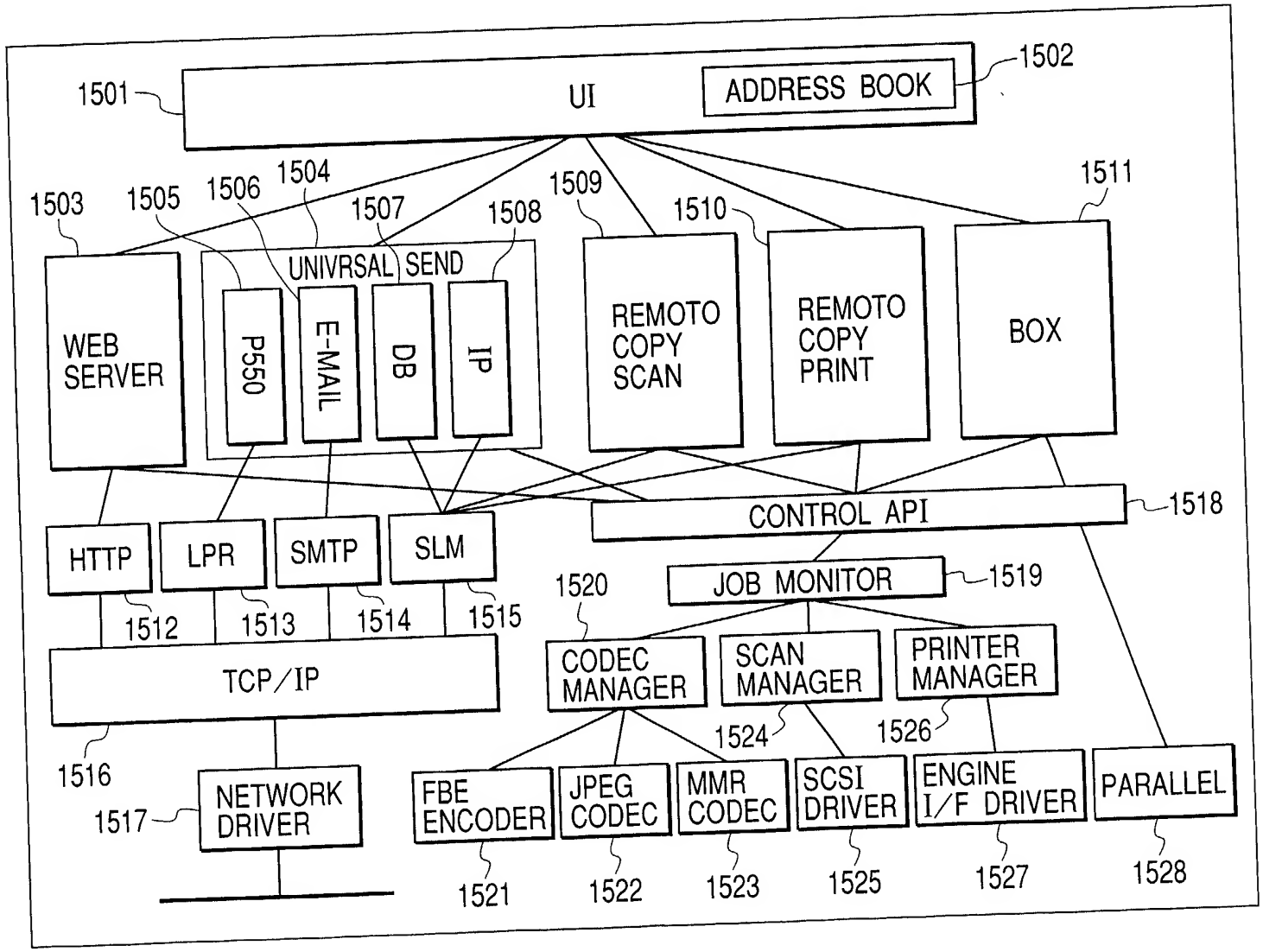

1501
UI
ADDRESS BOOK
1502
1503
1505
1506
1504
1507
1508
1509
1510
1511
UNIVRSAL SEND
WEB SERVER
P550
E-MAIL
DB
IP
REMOTO COPY SCAN
REMOTO COPY PRINT
BOX
CONTROL API
1518
HTTP
LPR
SMTP
SLM
JOB MONITOR
1519
1520
1512
1513
1514
1515
TCP/IP
CODEC MANAGER
SCAN MANAGER
PRINTER MANAGER
1524
1526
1516
1517
NETWORK DRIVER
FBE ENCODER
JPEG CODEC
MMR CODEC
SCSI DRIVER
ENGINE I/F DRIVER
PARALLEL
1521
1522
1523
1525
1527
1528

FIG. 3

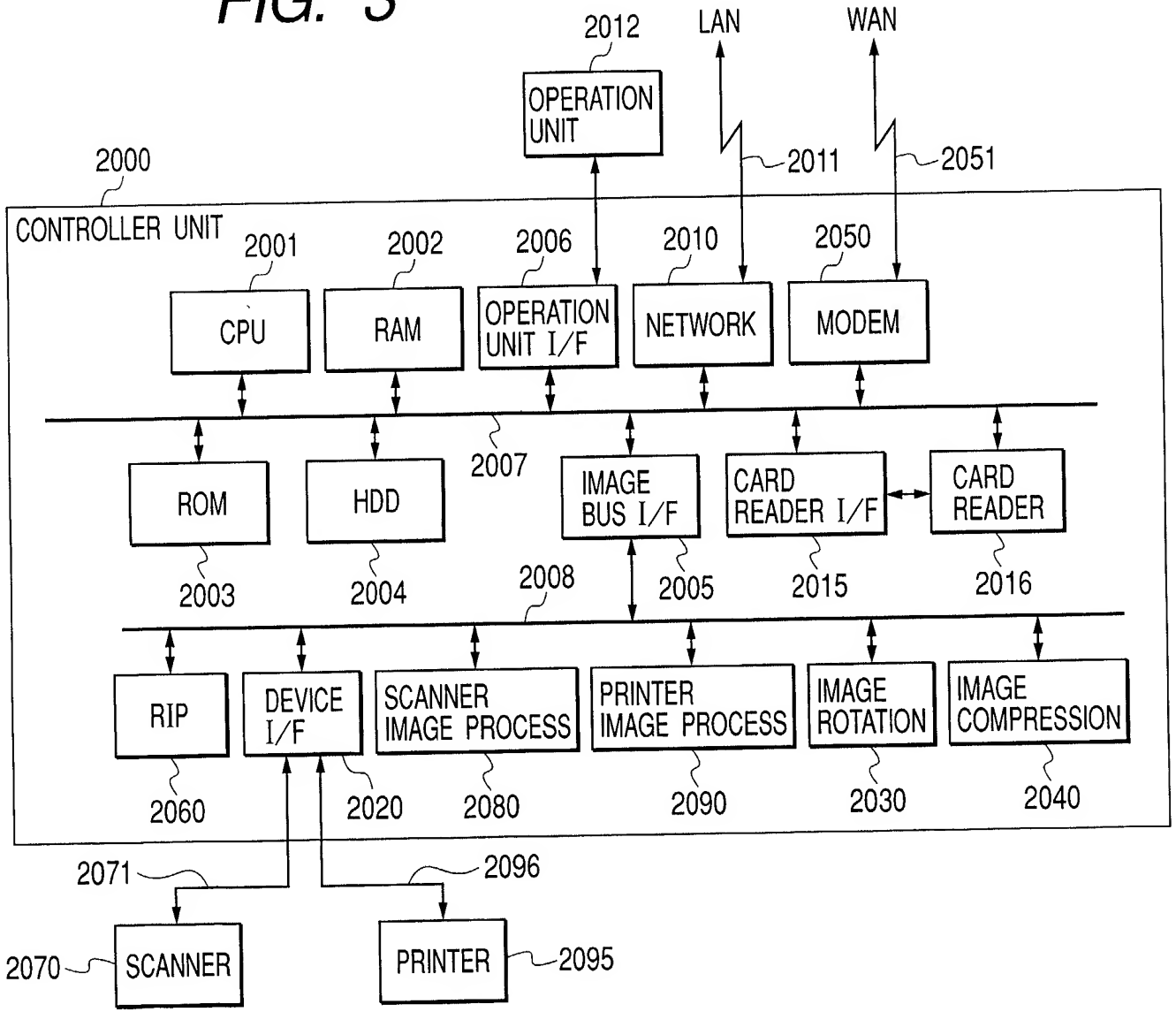

2012
LAN
WAN
OPERATION UNIT
2011
2051
2000
CONTROLLER UNIT
2001
2002
2006
2010
2050
CPU
RAM
OPERATION UNIT I/F
NETWORK
MODEM
2007
ROM
HDD
IMAGE BUS I/F
CARD READER I/F
CARD READER
2003
2004
2008
2005
2015
2016
RIP
DEVICE I/F
SCANNER IMAGE PROCESS
PRINTER IMAGE PROCESS
IMAGE ROTATION
IMAGE COMPRESSION
2060
2020
2080
2090
2030
2040
2071
2096
2070
SCANNER
PRINTER
2095

FIG. 4

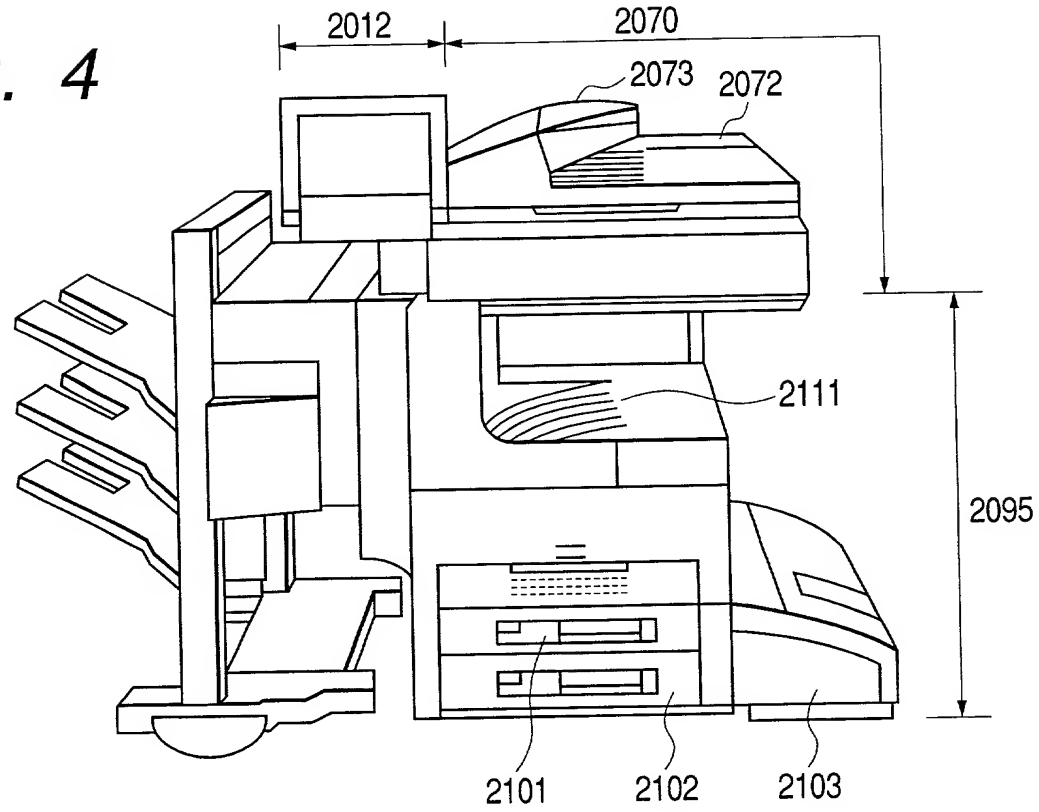

2012
2070
2073
2072
2111
2095
2101
2102
2103

FIG. 5

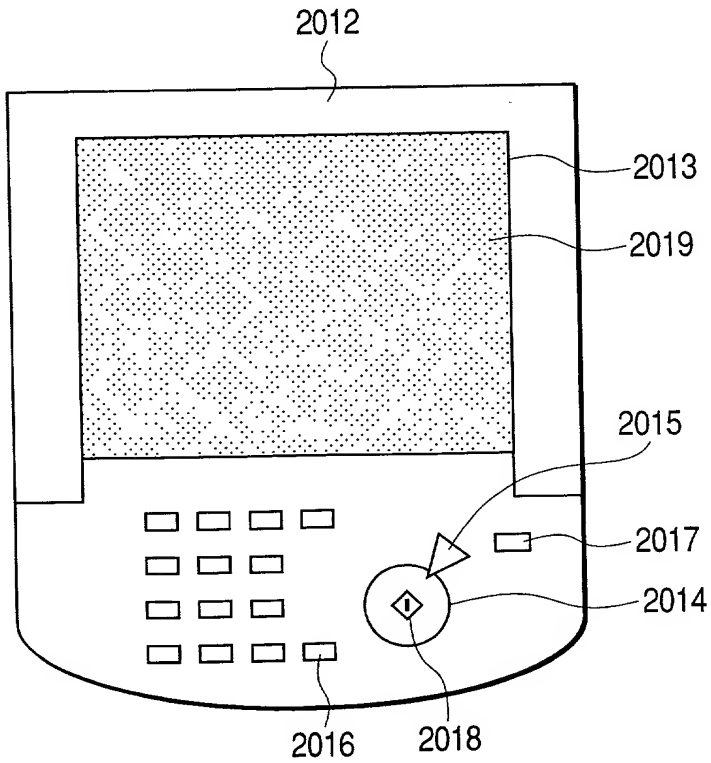

2012
2013
2019
2015
2017
2014
2016
2018

FIG. 6

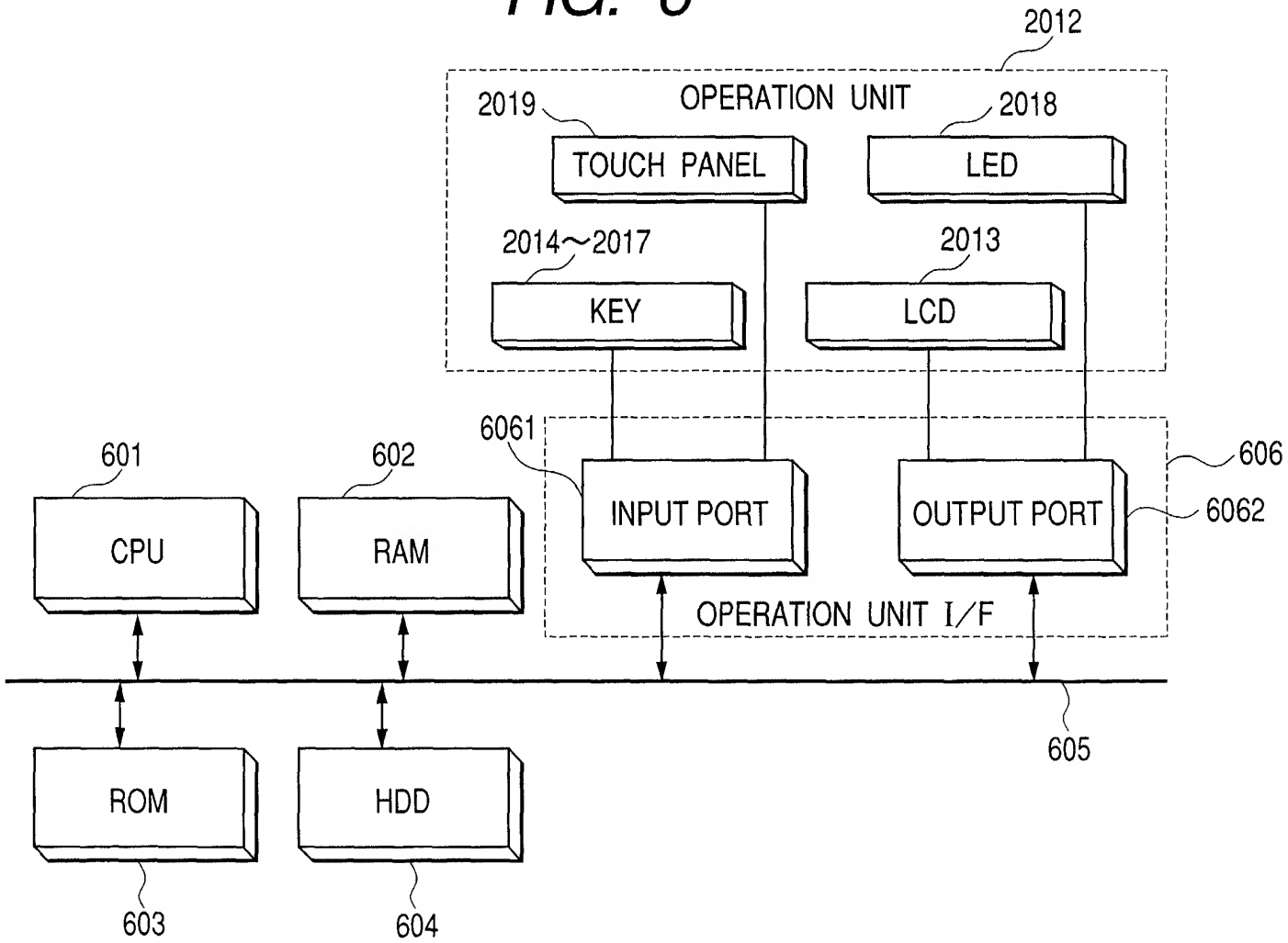

2012
OPERATION UNIT
2019
TOUCH PANEL
2018
LED
2014~2017
KEY
2013
LCD
6061
INPUT PORT
OUTPUT PORT
606
6062
601
CPU
602
RAM
OPERATION UNIT I/F
605
ROM
HDD
603
604

FIG. 7

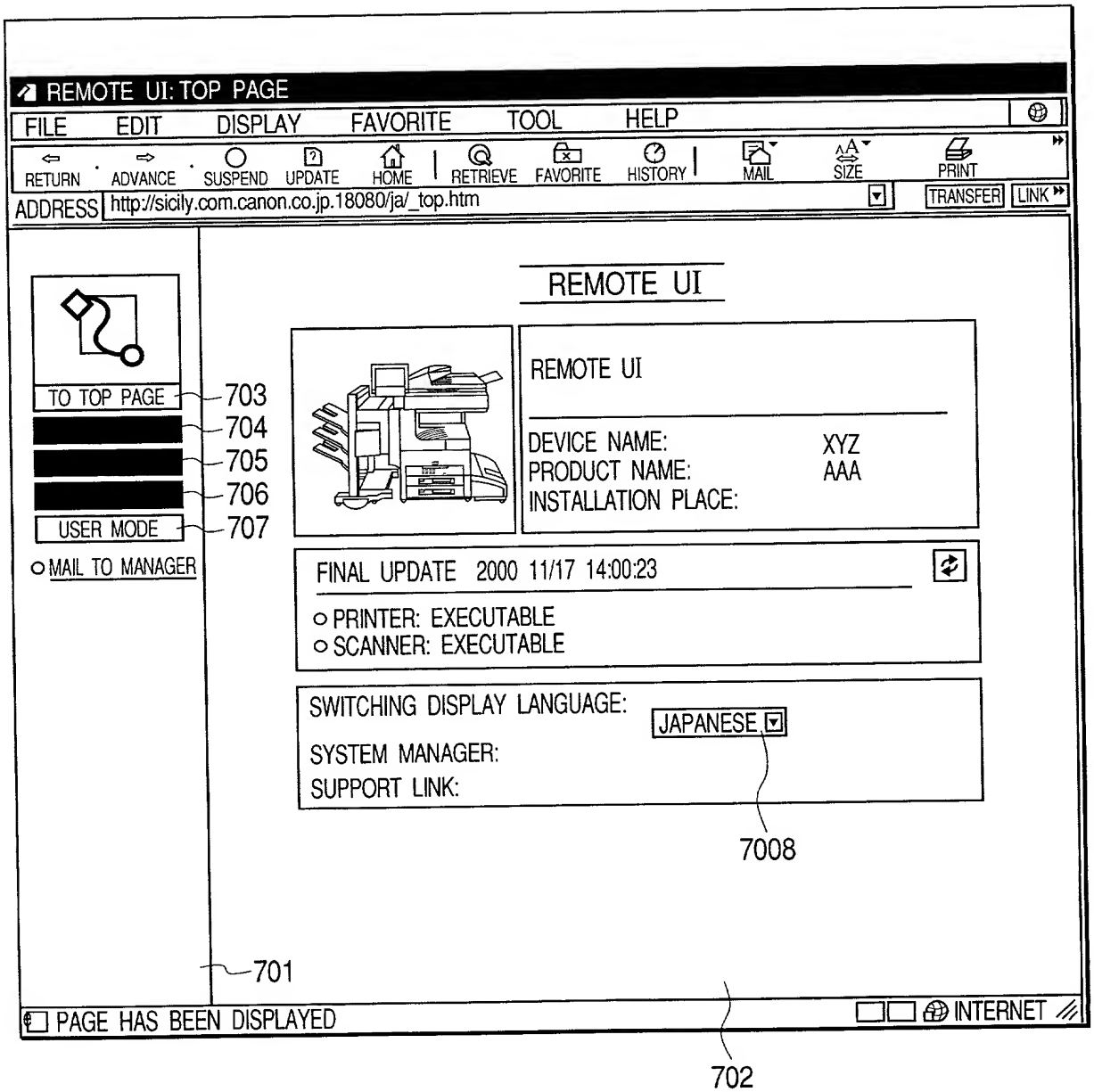

REMOTE UI: TOP PAGE
FILE EDIT DISPLAY FAVORITE TOOL HELP
RETURN ADVANCE SUSPEND UPDATE HOME RETRIEVE FAVORITE HISTORY MAIL SIZE PRINT
ADDRESS http://sicily.com.canon.co.jp.18080/ja/_top.htm
TRANSFER LINK
TO TOP PAGE
703
704
705
706
USER MODE
707
MAIL TO MANAGER
REMOTE UI
REMOTE UI
DEVICE NAME: XYZ
PRODUCT NAME: AAA
INSTALLATION PLACE:
FINAL UPDATE 2000 11/17 14:00:23
PRINTER: EXECUTABLE
SCANNER: EXECUTABLE
SWITCHING DISPLAY LANGUAGE:
JAPANESE
SYSTEM MANAGER:
SUPPORT LINK:
7008
701
PAGE HAS BEEN DISPLAYED
INTERNET
702

FIG. 8

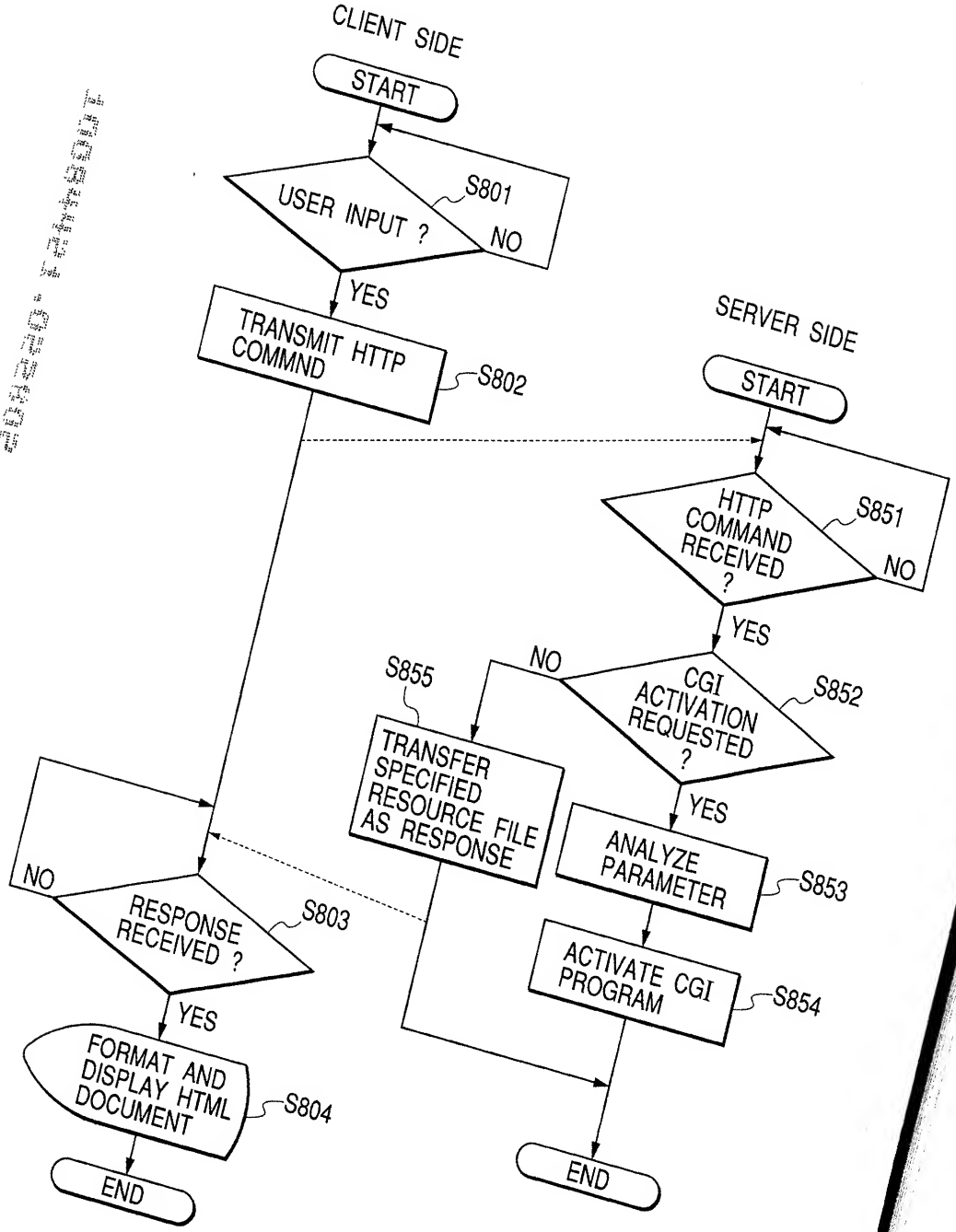

CLIENT SIDE
START
USER INPUT ?
S801
NO
YES
TRANSMIT HTTP COMMND
S802
SERVER SIDE
START
HTTP COMMAND RECEIVED ?
S851
NO
YES
CGI ACTIVATION REQUESTED ?
S852
NO
S855
YES
TRANSFER SPECIFIED RESOURCE FILE AS RESPONSE
ANALYZE PARAMETER
S853
ACTIVATE CGI PROGRAM
S854
END
RESPONSE RECEIVED ?
S803
NO
YES
FORMAT AND DISPLAY HTML DOCUMENT
S804
END

FIG. 9

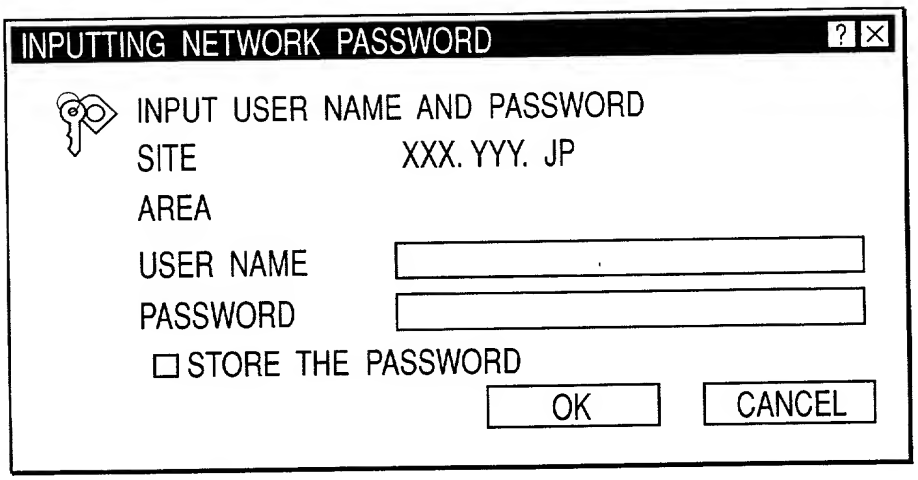

INPUTTING NETWORK PASSWORD
INPUT USER NAME AND PASSWORD
SITE
XXX. YYY. JP
AREA
USER NAME
PASSWORD
STORE THE PASSWORD
OK
CANCEL

FIG. 10

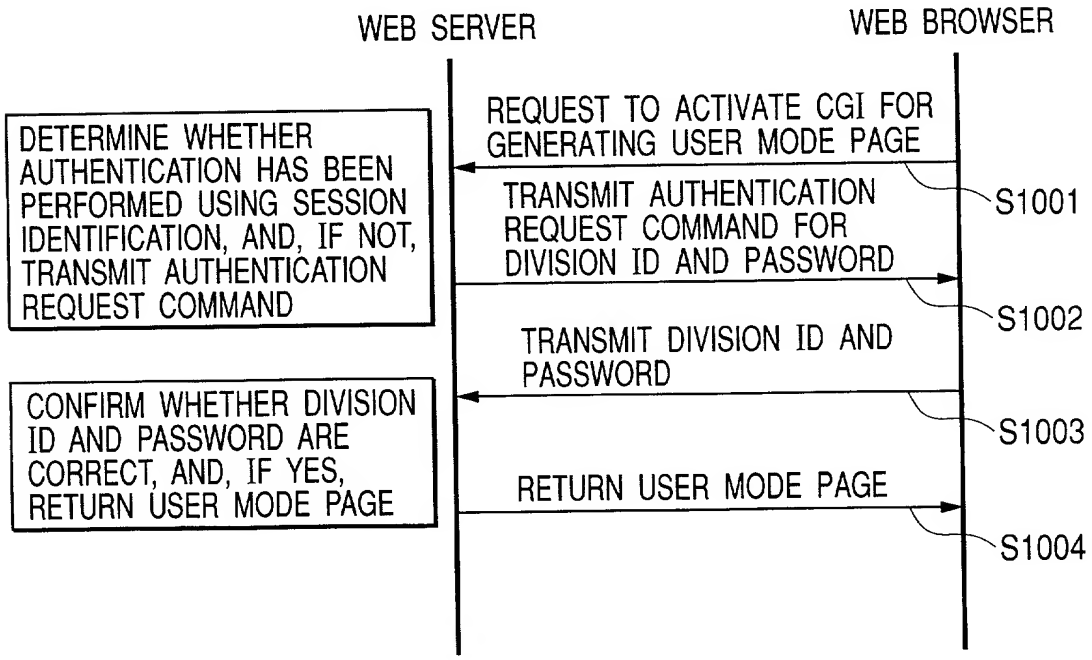

WEB SERVER
WEB BROWSER
DETERMINE WHETHER AUTHENTICATION HAS BEEN PERFORMED USING SESSION IDENTIFICATION, AND, IF NOT, TRANSMIT AUTHENTICATION REQUEST COMMAND
REQUEST TO ACTIVATE CGI FOR GENERATING USER MODE PAGE
TRANSMIT AUTHENTICATION REQUEST COMMAND FOR DIVISION ID AND PASSWORD
S1001
TRANSMIT DIVISION ID AND PASSWORD
S1002
CONFIRM WHETHER DIVISION ID AND PASSWORD ARE CORRECT, AND, IF YES, RETURN USER MODE PAGE
RETURN USER MODE PAGE
S1003
S1004

FIG. 11

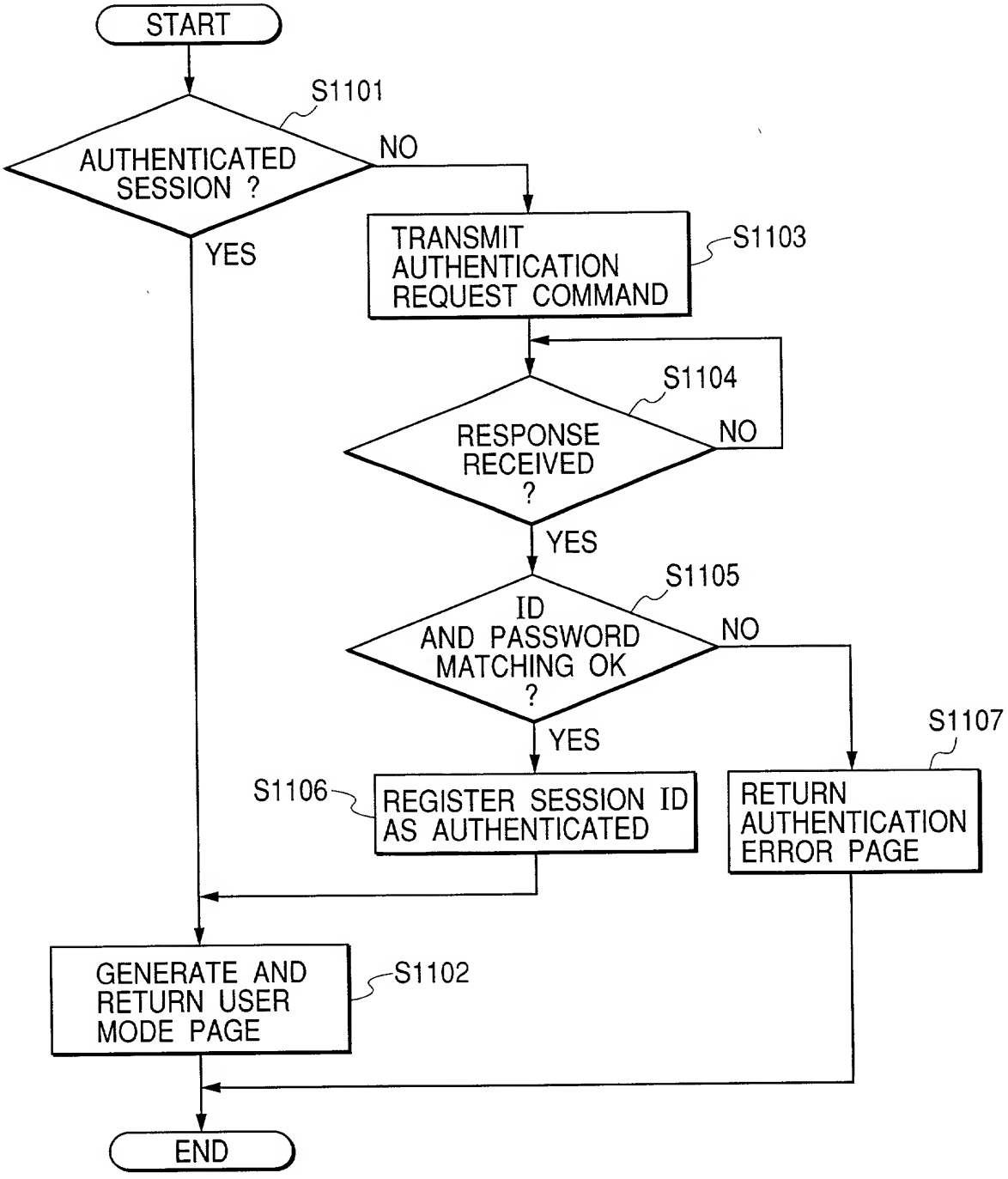

START
S1101
AUTHENTICATED SESSION ?
NO
YES
TRANSMIT AUTHENTICATION REQUEST COMMAND
S1103
S1104
RESPONSE RECEIVED ?
NO
YES
S1105
ID AND PASSWORD MATCHING OK ?
NO
YES
S1107
S1106
REGISTER SESSION ID AS AUTHENTICATED
RETURN AUTHENTICATION ERROR PAGE
GENERATE AND RETURN USER MODE PAGE
S1102
END

FIG. 12

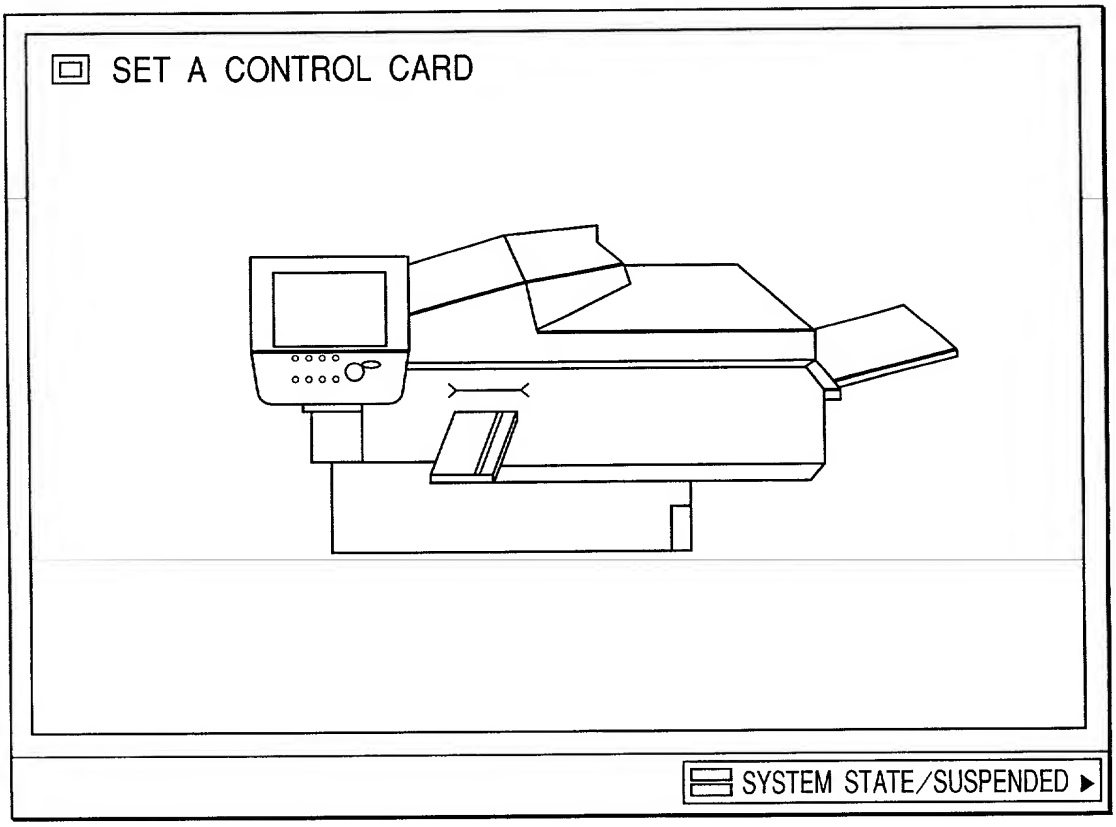


FIG. 13

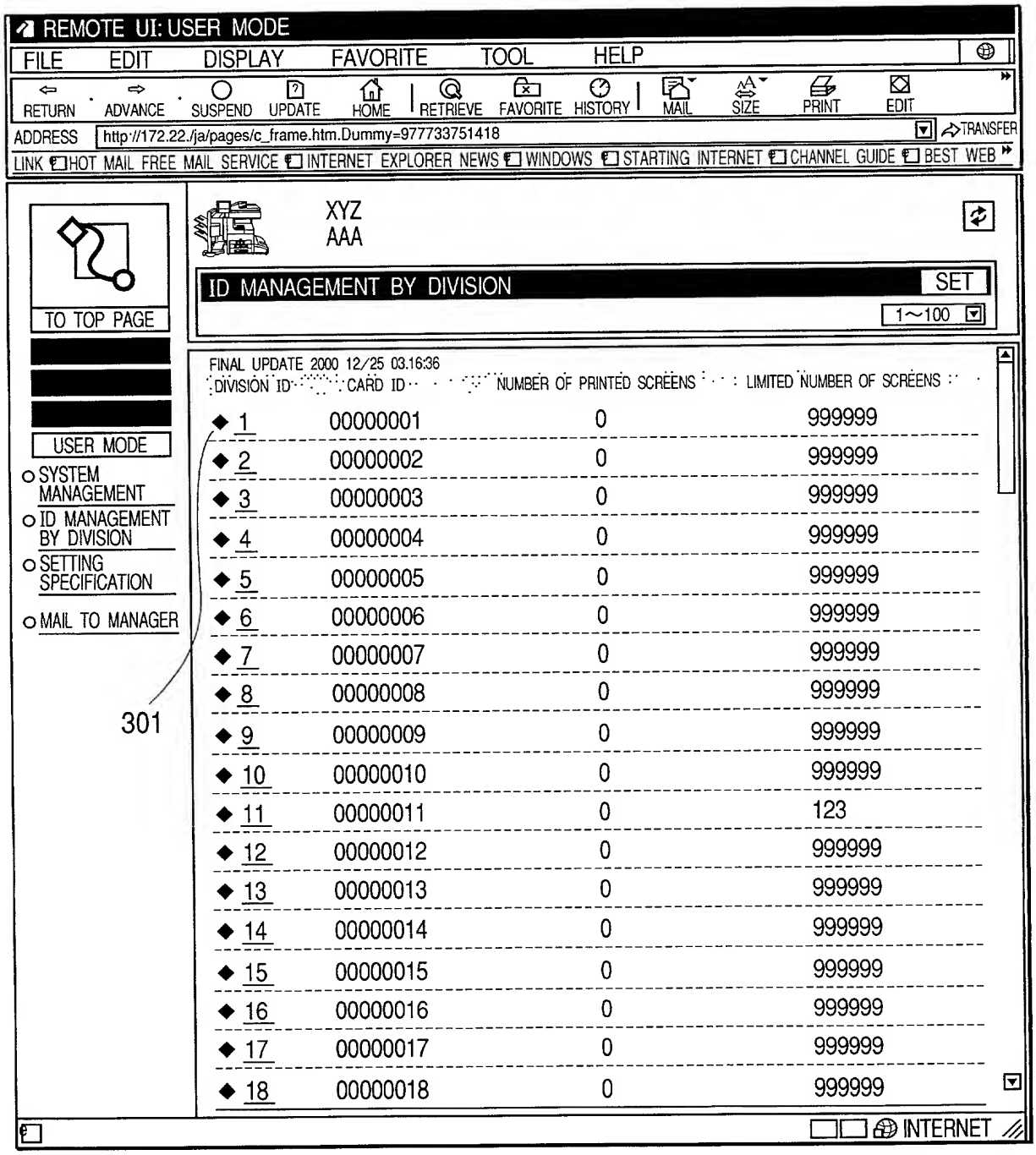

REMOTE UI: USER MODE
FILE EDIT DISPLAY FAVORITE TOOL HELP
RETURN ADVANCE SUSPEND UPDATE HOME RETRIEVE FAVORITE HISTORY MAIL SIZE PRINT EDIT
ADDRESS http://172.22./ja/pages/c_frame.htm.Dummy=977733751418
TRANSFER
LINK HOT MAIL FREE MAIL SERVICE INTERNET EXPLORER NEWS WINDOWS STARTING INTERNET CHANNEL GUIDE BEST WEB
TO TOP PAGE
USER MODE
SYSTEM MANAGEMENT
ID MANAGEMENT BY DIVISION
SETTING SPECIFICATION
MAIL TO MANAGER
301
XYZ
AAA
ID MANAGEMENT BY DIVISION
SET
1~100
FINAL UPDATE 2000 12/25 03.16:36
DIVISION ID
CARD ID
NUMBER OF PRINTED SCREENS
LIMITED NUMBER OF SCREENS
1 00000001 0 999999
2 00000002 0 999999
3 00000003 0 999999
4 00000004 0 999999
5 00000005 0 999999
6 00000006 0 999999
7 00000007 0 999999
8 00000008 0 999999
9 00000009 0 999999
10 00000010 0 999999
11 00000011 0 123
12 00000012 0 999999
13 00000013 0 999999
14 00000014 0 999999
15 00000015 0 999999
16 00000016 0 999999
17 00000017 0 999999
18 00000018 0 999999
INTERNET

FIG. 14

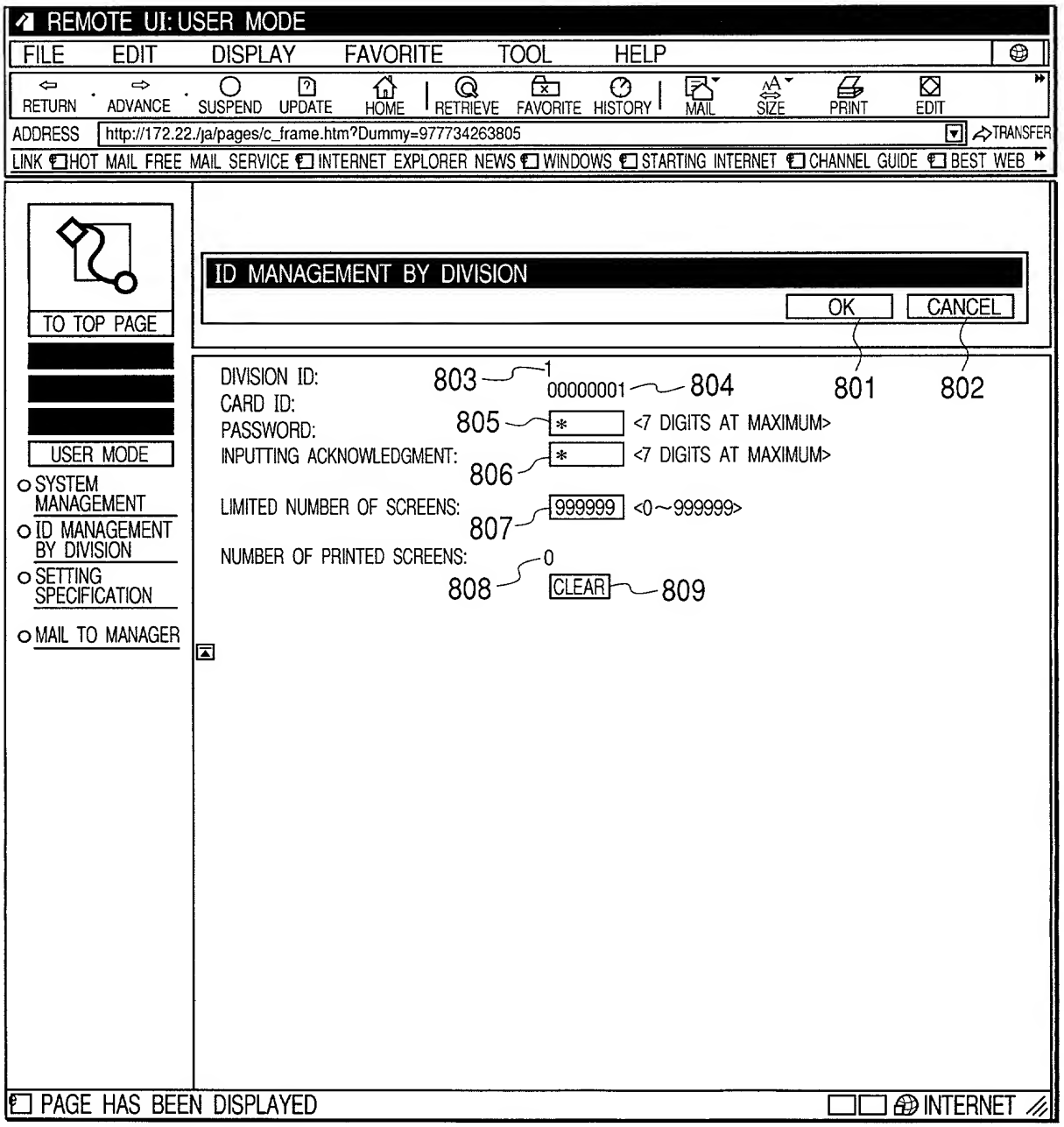

REMOTE UI: USER MODE
FILE EDIT DISPLAY FAVORITE TOOL HELP
RETURN ADVANCE SUSPEND UPDATE HOME RETRIEVE FAVORITE HISTORY MAIL SIZE PRINT EDIT
ADDRESS http://172.22./ja/pages/c_frame.htm?Dummy=977734263805
TRANSFER
LINK HOT MAIL FREE MAIL SERVICE INTERNET EXPLORER NEWS WINDOWS STARTING INTERNET CHANNEL GUIDE BEST WEB
TO TOP PAGE
USER MODE
SYSTEM MANAGEMENT
ID MANAGEMENT BY DIVISION
SETTING SPECIFICATION
MAIL TO MANAGER
ID MANAGEMENT BY DIVISION
OK
CANCEL
DIVISION ID:
CARD ID:
PASSWORD:
INPUTTING ACKNOWLEDGMENT:
LIMITED NUMBER OF SCREENS:
NUMBER OF PRINTED SCREENS:
1
00000001
<7 DIGITS AT MAXIMUM>
<7 DIGITS AT MAXIMUM>
999999
<0~999999>
0
CLEAR
803
804
801
802
805
806
807
808
809
PAGE HAS BEEN DISPLAYED
INTERNET

FIG. 15

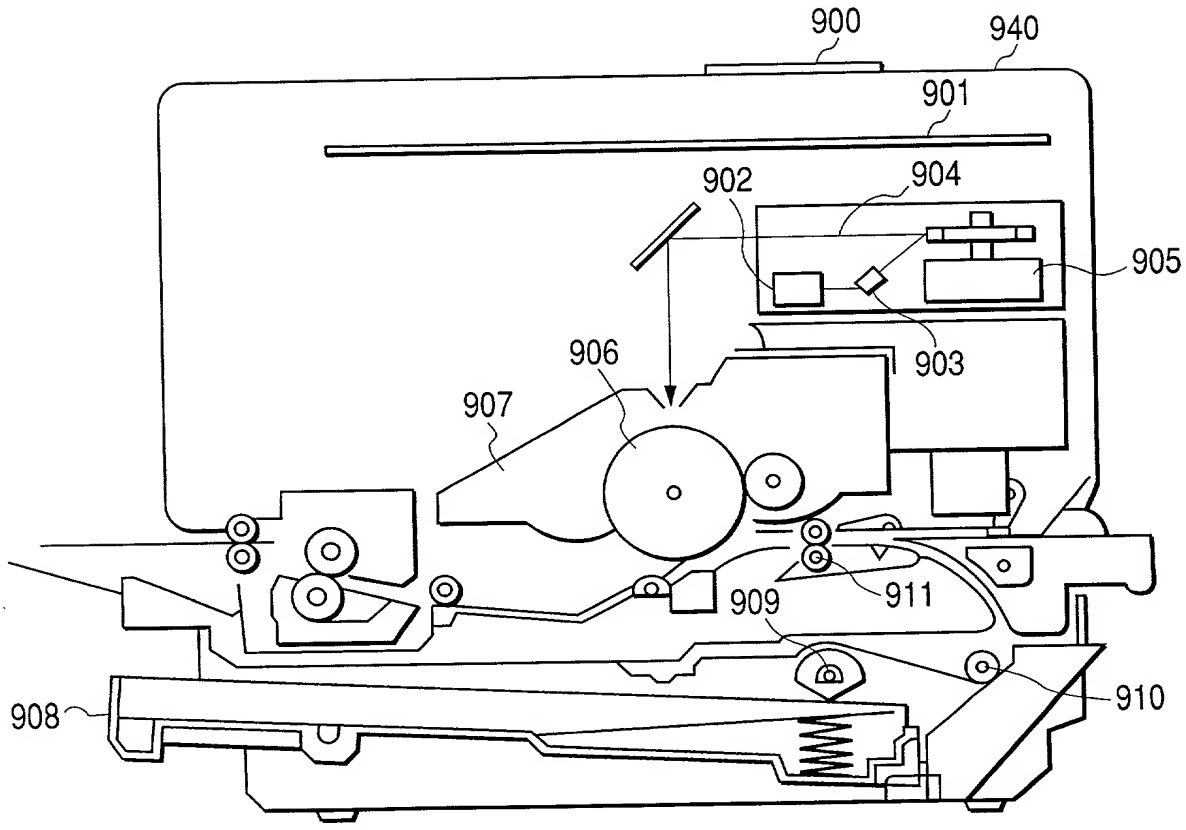


FIG. 16

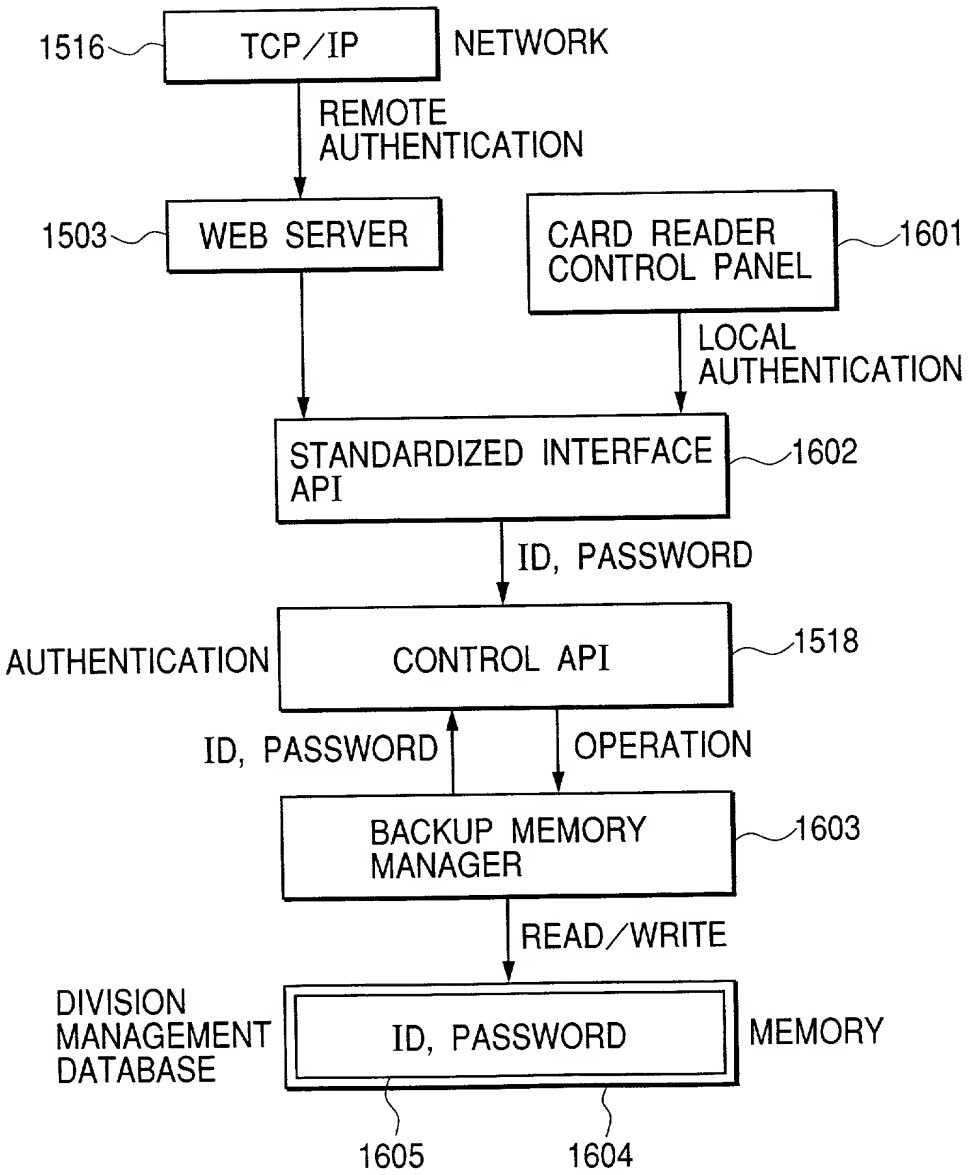

1516
TCP/IP
NETWORK
REMOTE AUTHENTICATION
1503
WEB SERVER
CARD READER CONTROL PANEL
1601
LOCAL AUTHENTICATION
STANDARDIZED INTERFACE API
1602
ID, PASSWORD
AUTHENTICATION
CONTROL API
1518
ID, PASSWORD
OPERATION
BACKUP MEMORY MANAGER
1603
READ/WRITE
DIVISION MANAGEMENT DATABASE
ID, PASSWORD
MEMORY
1605
1604

FIG. 17

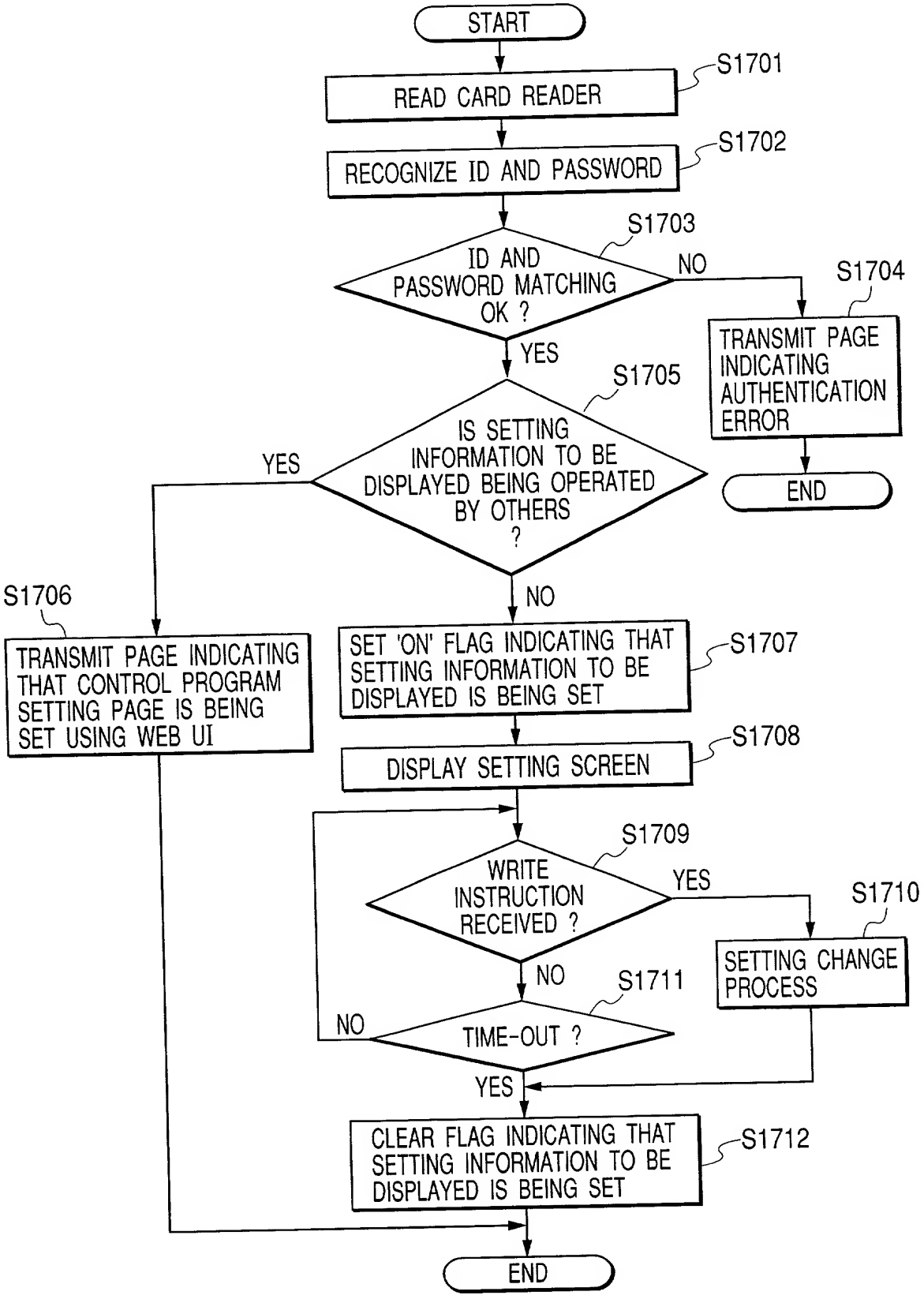
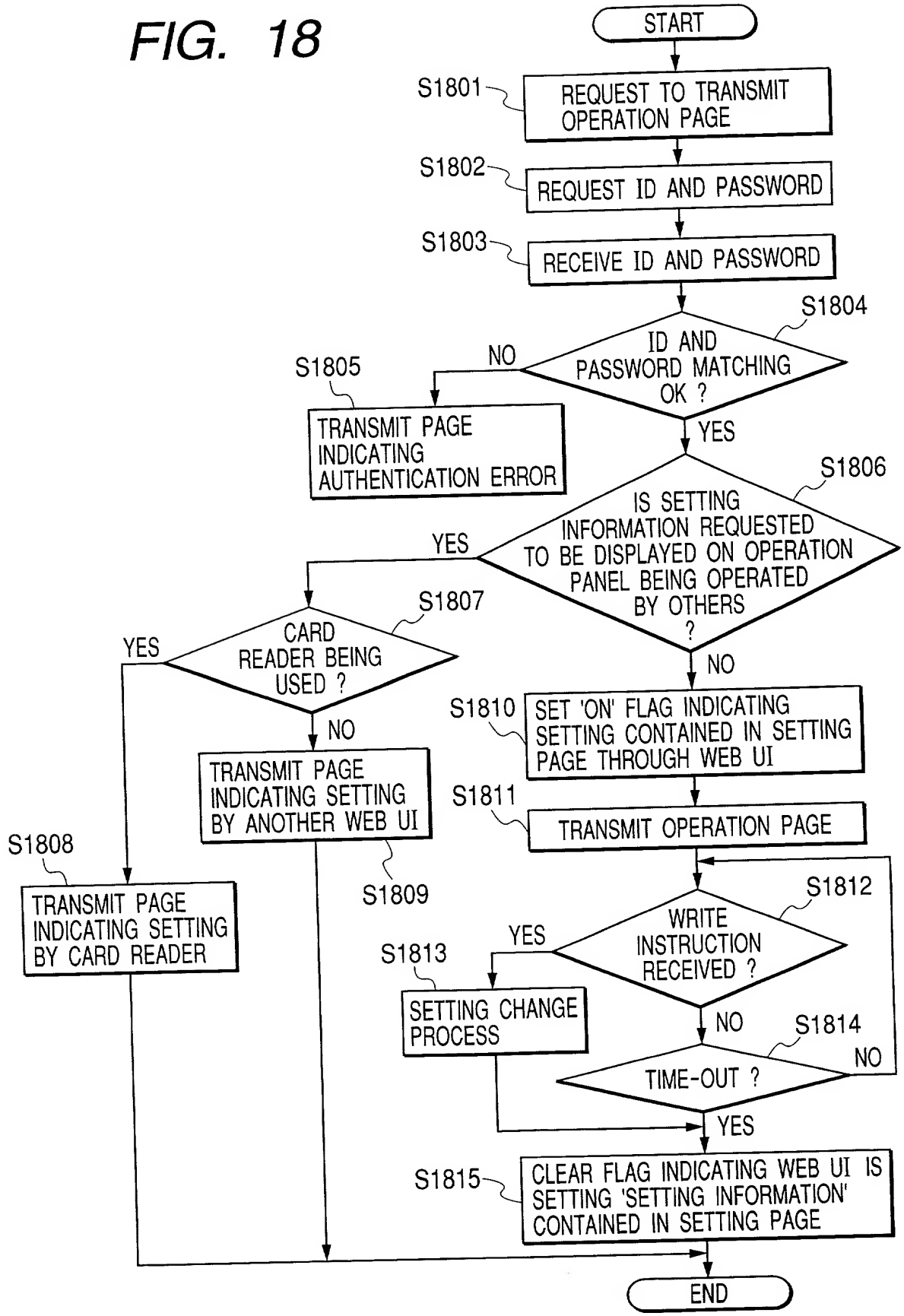

START
READ CARD READER
S1701
RECOGNIZE ID AND PASSWORD
S1702
ID AND PASSWORD MATCHING OK ?
S1703
NO
S1704
TRANSMIT PAGE INDICATING AUTHENTICATION ERROR
END
YES
IS SETTING INFORMATION TO BE DISPLAYED BEING OPERATED BY OTHERS ?
S1705
YES
S1706
TRANSMIT PAGE INDICATING THAT CONTROL PROGRAM SETTING PAGE IS BEING SET USING WEB UI
NO
SET 'ON' FLAG INDICATING THAT SETTING INFORMATION TO BE DISPLAYED IS BEING SET
S1707
DISPLAY SETTING SCREEN
S1708
WRITE INSTRUCTION RECEIVED ?
S1709
YES
S1710
SETTING CHANGE PROCESS
NO
TIME-OUT ?
S1711
NO
YES
CLEAR FLAG INDICATING THAT SETTING INFORMATION TO BE DISPLAYED IS BEING SET
S1712
END

FIG. 18


START
S1801
REQUEST TO TRANSMIT OPERATION PAGE
S1802
REQUEST ID AND PASSWORD
S1803
RECEIVE ID AND PASSWORD
S1804
ID AND PASSWORD MATCHING OK ?
NO
S1805
TRANSMIT PAGE INDICATING AUTHENTICATION ERROR
YES
S1806
IS SETTING INFORMATION REQUESTED TO BE DISPLAYED ON OPERATION PANEL BEING OPERATED BY OTHERS ?
YES
S1807
CARD READER BEING USED ?
YES
NO
S1808
TRANSMIT PAGE INDICATING SETTING BY CARD READER
NO
TRANSMIT PAGE INDICATING SETTING BY ANOTHER WEB UI
S1809
S1810
SET 'ON' FLAG INDICATING SETTING CONTAINED IN SETTING PAGE THROUGH WEB UI
S1811
TRANSMIT OPERATION PAGE
S1812
WRITE INSTRUCTION RECEIVED ?
YES
S1813
SETTING CHANGE PROCESS
NO
S1814
TIME-OUT ?
NO
YES
S1815
CLEAR FLAG INDICATING WEB UI IS SETTING 'SETTING INFORMATION' CONTAINED IN SETTING PAGE
END